

Mon Oct 09 10:46:42 2000 IBSNA:LM-63-1995 Photopia 1.5.0.20 PHOTOMETRIC REPORT PROJECT: V06-8 Mas-03 Mw-03 dubal-lenth up OPTIONS: Spawning 1 rays for each reaction. Writing 250 rays to a DXF file. Random number generator seed: 8. Tracing 30 reflections. Stop tracing ray at 2.0% of initial magnitude. Tracing 499968 initial lamp rays. Photometric test distance of 20.00 feet. LUMENS EXITING SYSTEM: Lumens (%) Reflection 130( 4.8%) 0 101( 3.8%) 1 175( 6.5%) 163 ( 6.0%) 146( 5.4%) 4 123 ( 4.6%) 5 114( 4.2%) 97( 3.6%) 7 88( 3.3%)

10

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# 1801 ( 66.7%) Total LUMENS ABSORBED BY SYSTEM:

76( 2.8%) 67( 2.5%)

60( 2.3%)

54( 2.0%)

49( 1.8%)

44( 1.6%) 39( 1.4%)

30( 1.1%)

27( 1.0%)

24( 0.9%)

22( 0.8%)

20( 0.7%)

15( 0.6%)

14( 0.5%)

12( 0.5%)

11( 0.4%)

10( 0.4%)

9( 0.3%)

8( 0.3%)

7( 0.3%)

1.3%)

35(

17( 0.7%)

Lumens (%) Layer Name 0( 0.0%) LAMP-F14T5A 329( 12.2%) LAMP-F14T51 45( 1.7%) LAMP-F14T52 120( 4.5%) REFL-MASK 198( 7.3%) REFL-CAVITY 10( 0.4%) REFL-SHOLDER1 43( 1.6%) REFL-FAN2 9( 0.4%) REFL-ENDS REFL-FAN1 32( 1.2%) 0( 0.0%) REFL-MASK BLOK 0( 0.0%) REFL-FAN BLOK 10( 0.4%) REFL-SHOLDER\_VERTICAL 3( 0.1%) REFL-SHOL\_DIF 803 (29.7%) Total Lumens (%) Material 374 ( 13.9%) PHOSGLAS 331(12.3%) PERFE980 96( 3.6%) ALMIRO02 0(0.0%) ZERO0000 802 (29.7%) Total

#### UNACCOUNTED LUMENS:

reached interreflection limit: 95.44 ( 3.5%)

Number of Lamps: 2 Lumens per Lamp: 1350
Ballast Factor: 1.00 Ballast-Lamp Photometric Factor: 1.00
Luminaire Width: 0.8000 Length: 3.4777 Height: 0.2654
Photometry Type: C Units: feet

#### Candela Distribution:

	0.00	22.50	45.00	67.50	90.00
0.00	0.000	0.000	0.000	. 0.000	0.000
5.00	0.000	0.000	0.000	0.000	0.000
10.00	0.000	0.000	0.000	0.000	0.000
15.00	0.000	0.080	0.100	0.120	0.000
20.00	0.000	0.090	0.230	0.080	0.160
25.00	0.000	0.070	0.050	0.150	0.000
30.00	0.130	0.250	0.260	0.000	0.290
35.00	0.220	0.360	0.220	0.250	0.060
40.00	0.000	0.160	0.180	0.360	0.060
45.00	0.000	0.200	0.430	0.360	0.300
50.00	0.280	0.350	0.510	0.330	0.250
55.00	0.080	0.390	0.570	0.690	0.140
60.00	0.150	0.510	0.580	0.580	0.230
65.00	0.150	0.930	0.850	0.840	0.570
70.00	0.070	0.430	1.32	1.19	0.560
75.00	0.180	1.34	2.31	1.69	0.800
80.00	0.320	1.90	2.88	2.46	0.620
85.00	0.610	4.27	4.38	3.63	1.16
90.00	10.6	52.5	73.7	86.8	91.9
95.00	34.4	257	443	497	510
100.00	42.8	261	623	823	897
105.00	48.5	184	596	842	926
110.00	54.8	130	498	778	877
115.00	61.1	103	340	667	793
120.00	65.7	105	222	468	570
125.00	74.2	107	165	304	385
130.00	80.0	105	146	196	242
135.00	90.2	111	141	169	191
140.00	91.1	114	144	159	168
145.00	96.4	115	136	158	159
150.00	94.2	118	137	147	156
155.00	101	120	131	144	150
160.00	113	116	125	130	142
165.00	108	113	126	128	133
170.00	105	113	118	125	116
175.00	111	93.4	107	123	115
180.00	102	102	102	102	102

Zonal	Lumens	
Cone	Between	Lumens
0.0	0.0- 2.5	0.00
5.0	2.5- 7.5	0.00
10.0	7.5- 12.5	0.00
15.0	12.5- 17.5	0.01
20.0	17.5- 22.5	0.02
25.0	22.5- 27.5	0.02
30.0	27.5- 32.5	0.05
35.0	32.5- 37.5	0.08
40.0	37.5- 42.5	0.06
45.0	42.5- 47.5	0.11
50.0	47.5- 52.5	0.15
55.0	52.5- 57.5	0.20
60.0	57.5- 62.5	. 0.22
65.0	62.5- 67.5	0.37
70.0	67.5- 72.5	0.42
75.0	72.5- 77.5	0.77
80.0	77.5- 82.5	1.04
85.0	82.5- 87.5	1.80
90.0	87.5- 92.5	36.21
95.0	92.5- 97.5	200.44
100.0	97.5-102.5	293.78
105.0	102.5-107.5	279.21
110.0	107.5-112.5	240.92
115.0	112.5-117.5	190.91
120.0	117.5-122.5	132.01
125.0		90.34
130.0		63.80
135.0	132.5-137.5	54.46
140.0	137.5-142.5	48.20
145.0	142.5-147.5	42.14
150.0	147.5-152.5	36.11
155.0	152.5-157.5	30.17
160.0	157.5-162.5	23.37
165.0	162.5-167.5	17.29
170.0	167.5-172.5	11.09
175.0	172.5-177.5	5.21
180.0	177.5-180.0	0.61

### Zonal Lumen Summary

Zone	Lumens	%Lamp	%Fixt
0- 30	0	0.0	0.0
0- 40	0	0.0	0.0
0- 60	1	0.0	0.0
0- 90	23	0.9	1.3
90-120	1290	47.8	71.6
90-130	1478	54.7	82.0
90-150	1673	62.0	92.9
90-180	1778	65.9	98.7
0-180	1802	66.7	100.0

Total Luminaire Optical Efficiency = 66.7%

## Luminaire Spacing Criterion:

0 deg	90 deg
5.44	5.44

### Average Luminaire Luminance (cd/sqmeter):

	0	45	90			
0	0.00	0.00	0.00			
45	0.00	1.83	1.23			
50	1.54	2.28	1.08			
55	0.49	2.72	0.64			
60	1.03	2.99	. 1.13			
65	1.18	4.81	3.05			
70	0.65	8.33	3.31			
75	2.09	16.63	5.34			
80	4.98	24.34	4.79			
85	14.46	45.23	10.75			

Coefficients of Utilization - Zonal Cavity Method:

pfc = 0.20

рсс		•	8				7			.5			.3			.1		0
pw RCR	.7	.5	.3	.1	.7	.5	.3	.1	.5	.3	.1	.5	.3	.1	.5	.3	.1	0
0	64	64	64	64	55	55	55	55	37	37	37	21	21	21	7	· 7	7	0
1	58	55	53	51	49	47	45	44	32	31	30	18	18	17	6	5	5	0
2	53	48	44	41	45	41	38	36	28	26	25	16	15	14	5	5	4	0
3	48	42	38	34	41	36	32	29	25	22	21	14	13	12	4	4	4	0
4	44	37	32	28	37	32	28	25	22	19	17	12	11	10	4	3	3	0
5	40	33	28	24	34	28	24	21	19	17	15	11	10	8	3	3	2	0
6	37	29	24	20	31	25	21	18	17	14	12	10	8	7	3	2	2	0
7	34	26	21	18	28	22	18	15	15	13	11	9	7	6	2	2	2	0
8	31	23	19	15	26	20	16	13	14	11	9	8	6	5	2	2	1	0
9	29	21	16	13	24	18	14	12	12	10	8	7	6	5	2	2	1	0
10	27	19	15	12	23	16	13	10	11	9	7	6	5	4	2	1	1	0.





